

Warning: to prevent fire or shock hazard, do not expose camera or monitor to rain or moisture.



The lightning flash with arrowhead symbol, within a triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure; that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

Caution: to reduce the risk of electric shock, do not remove cover (or back). No user serviceable parts inside. Refer servicing to qualified service personnel.



The exclamation mark within a triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Electro Magnetic Compatibility (EMC)

This equipment complies with the European rules for EMC according to EN55013, EN55020 and EN50082-1.

The equipment conforms with the EMC directive and low-voltage directive.

This device complies with EMC rules under test conditions that included use of system cables and connectors between system components. If you have any problems, contact your dealer.

Warning

Any unauthorized modification to this equipment may cause violation of the EMC rules resulting in the revocation of the authorization to operate the equipment.

Note: we advise you to use the following types of mains power adapters in combination with the camera:

U.K. Philips VCM1162/01R

EUR Philips VCM1162/00R

Important notes for users in the U.K.

If the fitted plug is not suitable for your mains socket, it should be removed and be replaced by an appropriate plug.

How to replace a plug

- Cut the mains plug from the lead.
- Strip the sheathing so the wires will become free for the necessary length to connect the UK-mains plug (not supplied).

The wires in the mains lead are coloured according to the following code: blue=neutral (N), brown=live (L). As these colours may not correspond with the colour markings identifying the terminals in your plug, proceed as follows:

- Connect the blue wire to the terminal marked N or coloured black.
- Connect the brown wire to the terminal marked L or coloured red.

Caution

Do not connect either wire to the earth terminal in the plug, marked E (or $\perp$) or coloured green (or green and yellow).

Before replacing the plug cover, make certain that the cord grip is clamped over the sheath of the lead, not simply over the two wires.

Fuse

If the mains plug (or adapter) contains a fuse, the value of this fuse should be 3 Amp. Alternatively, if another type of plug (not fused) is used, the fuse at the distribution board should not be greater than 5 Amp.

Colour Observation Quad

Table of contents

	Page
Introduction	3
Connection and operation facilities	4
Installation	5
Camera	
Monitor	
Operation of the monitor	5
Power on/off	
Power save/active	
Talk function	
Action function	
Freeze image	
View modes	
Camera selection	
System reset	
How do the menus work?	7
Menu control buttons	
The menus	7
Main menu	
Camera configuration	
Alarm function on/off	
Silent function on/off	
Alarm history list	
Camera dwell time	
Auxiliary output selection	
Install menu	
Display time and date	
Time adjustment	
Date adjustment	
Auto install	
Language selection	
Alarm function	9
Trouble shooting	10
Double addressing	
No valid camera input selection	
System error	
What to do in case of a system error?	
Special alarm	
System cable	11
Accessories	11
Tips for maintenance	12

Introduction

Thank you for buying our observation system. By purchasing this system you possess a sophisticated, easy-to-operate observation and security system. It features a Quad mode, in which you can see the images of up to 4 cameras in 4 quadrants on the monitor screen.

Operation and programming of the system is performed through On Screen Display (OSD) menus. With these menus you can adapt the system to your own convenience.

If you follow the installation and operation instructions as described in the following sections, you will quickly learn how to adjust and operate your observation system.

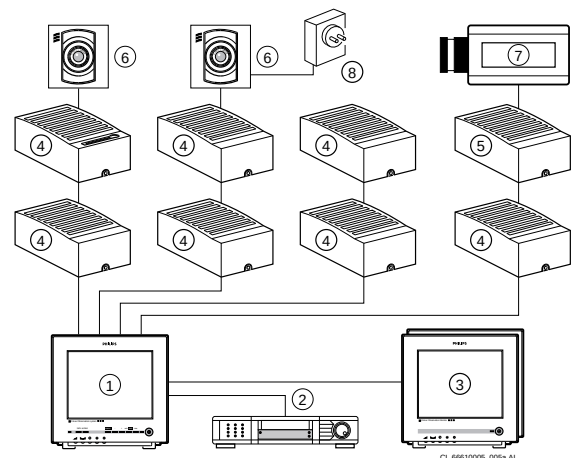
The following items are included in this kit:

- 1 Monitor
- 1 Camera + camera wall bracket
- 1 System cable (25m/75ft)
- 1 System manual + 1 camera manual

Accessories:

The system can be extended by one or more system accessories or other peripheral equipment, such as:

- Intercom box
- Alarm/Action box
- Alarm/Action box + PIR motion detector
- Cameras (to a maximum of 4)
- Interface box
- Slave monitor (to a maximum of 3)
- Mains power adapter
- (Time lapse) Video Recorder (VCR)



- | | |
|------------------------|-----------------------------|
| 1 Quad monitor | 5 Interface box |
| 2 Video recorder (VCR) | 6 System cameras |
| 3 Slave monitor(s) | 7 Non system cameras (CVBS) |
| 4 Accessory boxes | 8 Mains power adapter |
| (0-2 per cable) | |

Read these instructions, before putting your system in operation.

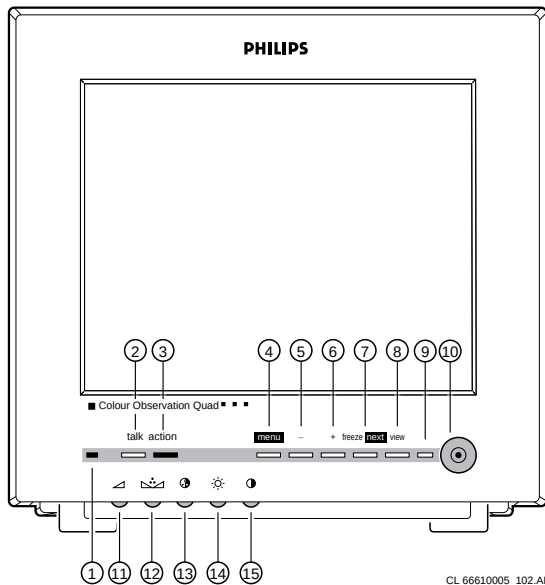
Mains supply:

The monitor accepts a mains power voltage of 100-240V~, 50/60Hz.

For the camera(s) and system accessory boxes a safe low-voltage (16-32V $\Rightarrow$) is supplied by the Quad monitor through the system cable.

The Quad monitor, camera(s) and accessories are automatically switched on when the Quad monitor is switched on with the rear mains switch.

Connection and operation facilities



1 Microphone

2 Talk

While you press this button, you can speak through the optional intercom (release the button to listen).

3 Action

By means of this button you can with an optional Alarm/Action box, for instance, open a door.

4 Menu

On Screen Display menu on/off.

Remark: If no button entry is given within 30 seconds the menu will automatically switch off.

5 Down

There are two possibilities:

Menu off

- In **full screen mode** this button selects the previous camera input (video image + sound)
- In **Quad mode** this button selects the previous camera input indicated by a green border. The selected camera input will be used for sound and for the talk and action buttons.

Menu on

- This button decreases or changes the value of a selected menu item.

6 Up

There are two possibilities:

Menu off

- In **full screen mode** this button selects the next camera input (video image + sound)
- In **Quad mode** this button selects the next camera input indicated by a green border. The selected camera input will be used for sound and for the talk and action buttons.

Menu on

- This button decreases or changes the value of a selected menu item.

7 Freeze/next

There are two possibilities:

Menu off

This button freezes or unfreezes the selected camera image in full screen mode or in quad mode (green border)

Menu on

This button selects the next menu item

8 View

Press this button to select the different view modes.

The following view modes can be selected:

- Full screen mode
- Camera sequence mode
- Quad mode
- VCR mode

9 System mode indication LED

The following modes are possible:

- Power on (LED is green)
- Power save mode (LED is red)
- Silent mode (LED is amber)
- Alarm during power silent mode (LED is red blinking)

10 Power save/active

Image and audio of the monitor off/on.

11 Volume

Volume control for the sound of the camera or intercom box (optional).

12 Hue

Hue control

Remark: For the European version this control has no function.

13 Colour

Colour intensity control

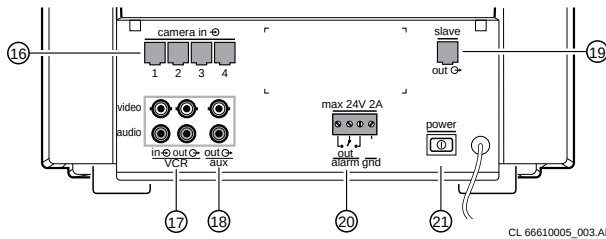
Remark: The colour intensity control will also affect the colour intensity of an attached slave monitor and an attached VCR.

14 Brightness

Brightness control

15 Contrast

Contrast control



16 Camera inputs (1 to 4)

17 VCR in/output

The VCR output contains the image (full/quad) displayed on screen (no menu) and the sound of the selected camera input.

18 Aux. output

Output which contains the image and sound of **one** of the 4 camera inputs (menu controlled).

19 Slave output

Output for an optional slave monitor, showing the image and sound of the selected camera image.

20 Alarm output contact (N.O./N.C.)

In case of an alarm this potential free contact (Normally Open/Normally Closed; 24V/2A max.) can activate a video recorder, siren or telephone selector.

21 Mains power switch

Observation system on/off.

Installation

Before you start to use the observation system, the Quad monitor, camera(s) and optional accessories should be installed. In this chapter the installation of the Quad monitor and a camera is described. For more detailed information about the installation and operation of a camera and accessories you should consult their manuals.

Remark: When the Quad monitor is switched on by means of the rear power switch, the monitor scans all camera inputs (= system check). This to check and register which cameras and accessories are connected to the camera inputs (= camera configuration).



When the configuration is altered, the system must be scanned again. Therefore always switch off the system when a camera or accessory is added or removed. Only operating the power save button is not sufficient.

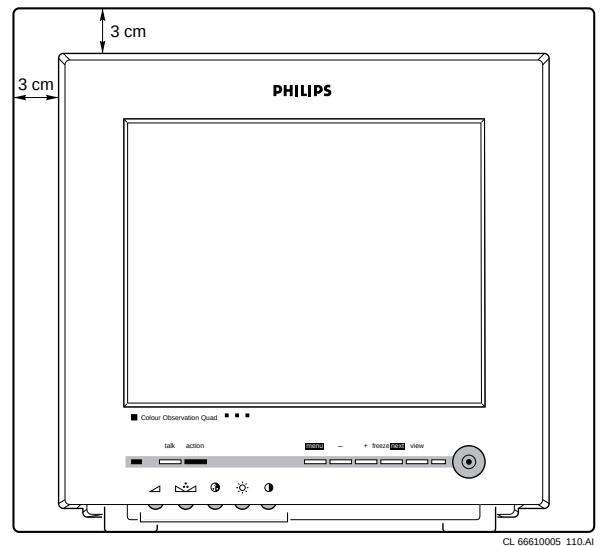
Camera

To ease the installation of the camera, take it and the Quad monitor to the area you want to observe. With the monitor on site you can check whether the camera covers the required area. For the installation of the camera you should consult the camera manual.

Monitor

When you have installed the camera(s) the monitor can be installed.

- 1 Place the monitor on a solid base (leave at least 3 cm around each side of the monitor for ventilation).



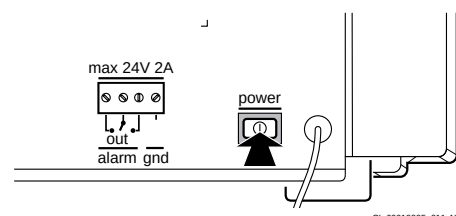
- 2 Connect the camera(s) and (optional) devices to the monitor.
- 3 Connect the monitor to the mains supply.
- 4 Switch on the main power switch (21) and wait until the camera image appears.
- 5 If necessary you can optimise the camera image by means of the contrast, brightness and/or colour control buttons at the front of the monitor.

Operation of the monitor

When you have installed the camera(s), the monitor and the accessories, you can start to work with your observation system.

Power on/off

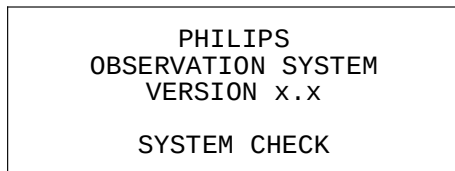
Push button at the rear of the monitor.



1 Power on

The monitor switches ON.

The following text appears on the monitor screen:



(x.x = version number)

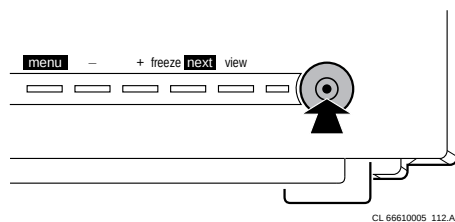
After approximately 30 seconds or when a button is pressed the camera image appears on the monitor screen.

Remark: At the first installation or when one or more cameras or accessories were added or removed from the system, the text *CONFIGURATION CHANGED* will appear on the monitor screen. In this way the monitor indicates that it has stored the new system configuration.

2 Power off

The monitor switches OFF (system mode indication LED is off).

Power save/active



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1 Power active

Image and sound of the monitor are switched on (power indication LED is green)

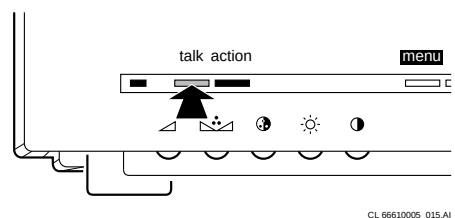
2 Power save

Image and sound of the monitor are switched off. The camera continues to transmit images and sound to the VCR, slave and aux. output. The alarm functions also remain active.

In power save mode you can select between two functions (selection is menu controlled):

- non-silent function (system mode indication LED is red)
- silent function (system mode indication LED is amber)

Talk function



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Press to speak through the intercom (optional). Release the button to allow your visitor to speak to you.

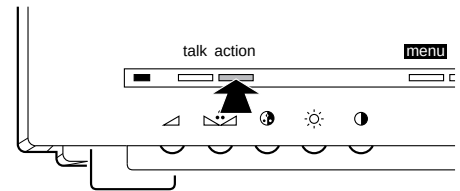
Remark: In Quad mode, the intercom box for the selected camera (green border) will be used.

Doorbell function:

If the doorbell button on the intercom box is pressed a buzzer sounds and the symbol is visible at the upper left-hand side of the monitor screen (full screen mode) or of the camera quadrant (Quad mode). The monitor selects the camera input the intercom box is designated to.

Remark: The talk button and doorbell function are only functional in combination with an intercom box (optional).

Action function



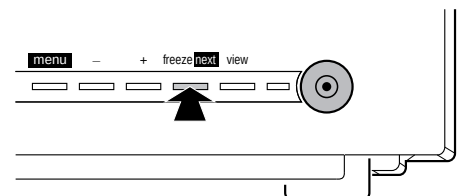
CL 66610005_016.AI

Press , for instance to open a door. As long as is pressed, a buzzer sounds and the symbol is visible at the upper left-hand side of the monitor screen (full screen mode) or of the camera quadrant (Quad mode).

If the system consists of more cameras, the action is done in the action box designated to the selected camera input.

Remark: The action button is only functional in combination with an Alarm/Action box (optional).

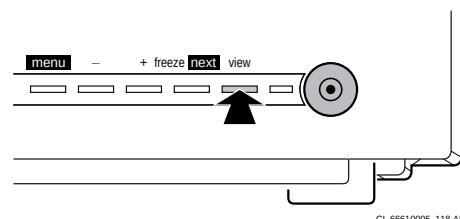
Freeze image



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With this button you can freeze the selected image. A frozen image can be recognized by the symbol. The freeze function can be used in all view modes, when no menu is displayed. Press , , or again to obtain a live image again.

View modes



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The following view modes can be selected:

1 Full screen mode

The monitor displays the image (and sound) of one of the connected cameras.

The selected camera input number is visible at the upper left-hand corner of the monitor screen. Press or to select the previous or next camera input.

2 Camera sequence mode

The monitor switches slowly between the pictures (image + sound) of the connected cameras. The camera input number and the symbol are visible at the top of the screen.

Remark: This mode is only functional when the observation system has more than one camera.

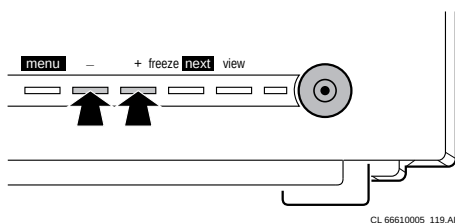
3 Quad mode

The images of the (max.) 4 connected cameras are displayed simultaneously at 1/4 of the screen size. The sound is coming from the selected camera whose border is high-lighted in green. Unavailable images are shown as grey areas. By pressing or you can select the previous or next camera input.

4 VCR input

The monitor reproduces the image and sound of the VCR. The symbol is visible at the left-hand top side of the monitor screen.

Camera selection



Press or to select the previous or next camera input.

System reset

By pressing and simultaneously for at least three seconds while switching on the main power switch at the rear of the Quad monitor, you can set the Quad monitor to the factory default settings. During a reset a beep sounds and the following text is shown on the monitor screen:

PHILIPS
OBSERVATION SYSTEM
VERSION x.x

SYSTEM RESET

After approximately 30 seconds or when a button is pressed the message will disappear from the monitor screen.

Remark: After a system reset all system configuration settings are lost. Use the AUTO INSTALL function (see Installation Menu) to scan the system. The Quad monitor will register the camera configuration again.

How do the menus work ?

With the On Screen Display menus you can adjust various system control functions.

The following menus can be selected:

MAIN MENU		
CAMERA	: 1	2 - 4
ALARM	: Y	N - Y
SILENT	: ON	
HISTORY	:	
DWELL TIME	: 15	S
AUX.	: 1	
INSTALL	:	

HISTORY		
94-12-23	16:35:59	POWER
95-02-22	01:11:32	ALARM1
96-05-06	04:23:45	CUT1
96-06-02	23:59:12	SHORT4
96-08-18	13:15:00	FAIL1
96-08-30	03:02:27	TAMP2

INSTALL MENU	
DISPLAY	LEFT
TIME	13:12:46
DATE	96-09-19
AUTO INSTALL	
LANGUAGE	ENGLISH

CL 66610005_021g.AI

The menu control buttons

The menus are operated with the following control buttons:

- Switches the main menu on/off
 - Remark:** If no button entry is given within 30 seconds the on screen display menu is automatically switched off.
 - Selects the previous menu when a sub-menu is selected.
- Selects the next menu item.
- /
 - Decreases, increases or changes the value of a selected menu item.
 - Selects the next menu if the symbol is highlighted.

The Menus

Main Menu (MAIN MENU)

The items of the Main Menu are discussed in the following sections:

1 Camera configuration (CAMERA)

By means of camera configuration you can see which camera inputs (1 to 4) are in use.

- Switch on the Main Menu.
- next to the text 'CAMERA' the numbers of the camera inputs to which a camera is connected are displayed.

CAMERA : 1 2 - 4

2 Alarm function active yes/no (ALARM)

With this function you can activate or deactivate the alarm function of the connected camera inputs.

- Y
The alarm function of this camera input is activated.
- N
The alarm function of this camera input is not activated.
In case an alarm box triggers an alarm, the buzzer, the alarm relay and the slave alarm information are not activated. The history list is not updated with the alarm event. Special alarms will always remain enabled.

Select ALARM from the Main Menu;

- Press **freeze next** until the camera input of which you want to activate or deactivate is highlighted.

ALARM : **Y** N - N



ALARM : Y **N** - N



- Press **-** or **+** to deactivate or activate the alarm function of the selected camera input.



ALARM : Y **Y** - N

3 Silent function on/off (SILENT)

The silent function can be used when the monitor is in 'power save' mode.

- Silent function OFF
In case of an alarm the monitor automatically switches to 'active' mode. The monitor reproduces the image and sound of the camera input the Alarm/Action box (which triggered the alarm) is designated to.
- Silent function ON
On occurrence of an alarm the monitor stays in 'power save' mode. No image or sound is reproduced, the system mode indication LED is red blinking. The alarm output contact is activated, information is sent to the slave monitor and the history table is updated with this alarm event.

Remark: The camera image and sound will always be sent to the VCR output and slave output.

Select SILENT from the Main Menu;

- Press **freeze next** until the text next to SILENT is highlighted.
- Press **-** or **+** to deactivate (OFF) or activate (ON) the silent function.

4 Alarm history list (HISTORY)

When you select HISTORY a list with the date, time, kind of alarm and the camera input number of the last 9 alarm events is displayed.

HISTORY		
94-12-23	16:35:59	POWER
95-02-22	01:11:32	ALARM1
96-05-06	04:23:45	CUT1
96-06-02	23:59:12	SHORT4
96-08-18	13:15:00	FAIL1
96-08-30	03:02:27	TAMP2

CL 66610005_023g.AI

Select HISTORY from the Main Menu;

- Press **freeze next** until the symbol **⇒** next to HISTORY is highlighted.
- Press **-** or **+**.
- The history list appears.
- Press **⇒** when you want to return to the Main Menu.

Remark: The explanation of the fault indications can be found in the section 'Special alarms'.

5 Camera dwell time (DWELL TIME)

With this option you can change the switching time interval (1 to 30 seconds).

Remark: This mode is only functional when you have enlarged the system to at least 2 cameras.

Select DWELL TIME from the Main Menu;

- Press **freeze next** until the actual dwell time is highlighted.
- Press **-** or **+** to decrease or increase the dwell time.

6 Auxiliary output selection (AUX.)

With this option you select which camera's output signal is sent to the aux. output.

Select AUX. from the Main Menu;

- Press **freeze next** until the present selected camera input number next to AUX. is highlighted.
- Press **-** or **+** to select the previous or next camera input number.

Install menu (INSTALL MENU)

Select INSTALL from the Main Menu;

- Press **freeze next** until the symbol **⇒** next to Install is highlighted.
- Press **-** or **+**.
- The Install Menu appears.
- Press **⇒** when you want to return to the Main Menu.

The install menu contains the following items:

INSTALL MENU	
DISPLAY	LEFT
TIME	13:12:46
DATE	96-09-19
AUTO INSTALL	⇒
LANGUAGE	ENGLISH

CL 66610005_024g.AI

The items of the install menu are discussed in the following sections.

1 Display time and date (DISPLAY)

With this option you can select if and where you want to display the time and date on the monitor screen (Lower left-hand corner, Lower right-hand corner or off).

Select DISPLAY from the Install Menu;

- Press **freeze next** until the text next to DISPLAY is highlighted.
- Press **-** or **+** to select between LEFT, RIGHT or OFF.

2 Time adjustment (TIME)

Use this option when you want to adjust the clock of the Quad monitor.

Select TIME from the Install Menu;

TIME : **23**:15:41

- Press **-** or **+** to adjust the hours.
- Press **freeze next** until the minutes are highlighted.

TIME : 23:**15**:41

- Press **-** or **+** to adjust the minutes.
- Press **freeze next** until the seconds are highlighted.

TIME : 23:15:**41**

- Press **-** or **+** to stop the clock.
- The seconds are set to zero.

TIME : 23:15:**00**

- Press **-** or **+** to adjust the seconds.
- Press **freeze next** to start the clock.

3 Date adjustment (DATE)

Use this option when you want to change the date.

Select DATE from the Install Menu;

- The year is highlighted.

DATE : **97**-09-19

- Press **-** or **+** to adjust the year.
- Press **freeze next** until the month is highlighted.

DATE : 97-**09**-19

- Press **-** or **+** to adjust the month.
- Press **freeze next** until the day is highlighted.

DATE : 97-09-**19**

- Press **-** or **+** to adjust the settings of the day.

4 Auto install (AUTO INSTALL)

Select this option when you want to check the configuration of the system.

Select AUTO INSTALL from the Install Menu;

- Press **freeze next** until the symbol **⏻** next to AUTO INSTALL is highlighted.
- Press **-** or **+** to start the installation procedure.
- The text SYSTEM CHECK appears on the monitor screen.

After approximately 20 seconds the following texts can appear on the monitor screen:

AUTO INSTALL COMPLETED

- The system is installed correctly.
After approximately 30 seconds or when a button is pressed the Install Menu returns.

CONFIGURATION CHANGED

- The system is changed; one or more cameras or accessories have been added or removed from the system since the last System Check was performed.
When a button is pressed the Install Menu returns.

5 Language

With this option you can select the language of the On Screen Display menus (English, Français, Deutsch, Português or Español).

Select LANGUAGE from the Install Menu;

- Press **freeze next** until the present selected language is highlighted.
- Press **-** or **+** to change the language.
- Press a button to return to the Install Menu.
- The new selected language is activated.

Alarm function

When a sensor triggers an Alarm/Action box (optional) the system's alarm function is activated.

In case of an alarm:

- 1 Monitor in active mode:
 - The monitor selects the camera input the Alarm/Action box is designated to.
 - In full screen mode: the blinking message "AL" and the camera input number is displayed at the bottom of the monitor screen.
 - In Quad mode: the border of the camera input to which the Alarm/Action box is designated will start blinking in red, and the blinking message "AL" plus the camera input number will be displayed in the camera input quadrant.
 - A buzzer sounds for max. 3 minutes.
 - The alarm output contact is activated (horn, siren or telephone selector) for max. 15 minutes.

- The alarm information is sent to the slave monitor (optional) for max. 3 minutes.
- The history table is updated with the alarm event.

2 Monitor in power save mode:

There are two possibilities:

- Non-silent mode (silent function off)
The monitor switches to active mode, see 'monitor in active mode'.
- Silent mode (silent function on)
The alarm output contact is activated (horn, siren or telephone selector) for max. 15 minutes.
The alarm information is sent to the slave monitor (optional) for max. 3 minutes.
The history table is updated with the alarm event.

Reset alarm:

The alarm resets whenever a button is pressed. The monitor returns to the status it was before the alarm occurred.

When the cause of the alarm has not been eliminated, the monitor continues to display the alarm message (not blinking). When you have eliminated the cause of the alarm the alarm message disappears.

When no button is pressed during an alarm the monitor automatically resets the alarm after max. 15 minutes. The Quad monitor returns to the status it was before the alarm occurred. The blinking alarm message is displayed until a button is pressed. When a button is pressed, there are two possibilities:

- 1 The cause of the alarm has not been eliminated; the monitor continues to display the alarm message (not blinking).
- 2 The cause of the alarm is eliminated; the alarm message disappears.

Remark: When a cable shortage alarm is reset the alarm message will not disappear from the monitor screen. To remove the message, first switch the monitor OFF, repair the cable shortage and then switch the monitor ON again.

Trouble shooting

Double addressing

If the Quad monitor detects two accessory boxes with the same setting of the CAMERA # and box number switches, it shows the following error message:

DOUBLE ADDRESSING
"Accessory name"
INPUT X/X

Explanation:

INPUT X/X
└─┬─> the physical camera input numbers to which the double addressed boxes are connected.

When a button is pressed, the message will disappear from the monitor screen.

Remark: Although the cameras will work, none of the accessories in any line will be functioning.

No valid camera input selection

The camera number of an intercom box or Alarm/Action box cannot be set to a camera input to which no camera is connected. If the Quad monitor detects an invalid camera input selection, it shows the following message:

INPUT X
"Accessory name"
HAS NO VALID
CAMERA SELECTION

- Switch the Quad monitor OFF.
- Change the camera number by means of the 'CAMERA #' switch situated inside the box (see box manual).
- Switch the Quad monitor ON.

Remark: Although the cameras will work, none of the accessories in any line will be functioning.

System error

When a SYSTEM CHECK is performed and a system error is detected a beep sounds. The following text appears on the monitor screen:

OBSERVATION SYSTEM
VERSION x.x
SYSTEM ERROR
SERVICE REQUIRED

When a button is pressed, the beep stops and the message disappears from the monitor screen.

What to do in case of a system error ?

- 1 Switch the Quad monitor OFF, wait 10 seconds, and then switch it ON again (mains power switch at the rear of the Quad monitor).
- 2 If during a SYSTEM CHECK the error message is displayed again you should call for service.

Special alarms

A special alarm is given in case of:

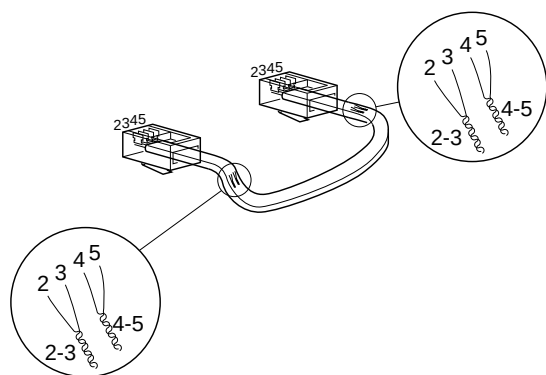
- CUT The system cable has been cut.
- SHORT There is a short circuit in the system cable.
- POWER The mains power was turned off.
- TAMPER An accessory housing has been opened.
- FAIL A failure in the system communication to accessories has been found.

- Press a button to stop the alarm.
If the alarm message is still displayed on the monitor screen you should, call for service.

Remark: In case of a System-cable short, the power supply to the shorted camera input will be switched off.

System cable

For the interconnections between the Quad monitor and camera 25m/75ft system cable is supplied. For an optimum picture and sound quality you should always use 4-wire dual twisted-pair cable when extending the connection. The max. allowed cable length is 300m/900ft). The cable and plugs are available in the hobby and professional trade. Pay attention that the connectors are fixed to the cable corresponding to the figure below.



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If the length of the system cable is more than 200m/600ft, a mains power adaptor should be used to feed the accessory or camera (see optional accessories). The max. allowed cable length is 300m/900ft.

Caution: The plugs used for the observation system have the same dimensions as standard telephone plugs. Never connect telephone equipment to the observation system.

Accessories

You have the possibility to extend your observation system with one or more accessories or other peripheral equipment. These system accessories can easily be incorporated in the desired camera line.

Intercom box

The intercom box has a doorbell function, meaning that a buzzer sounds when someone presses the intercom's doorbell button. When the doorbell button is pressed the monitor switches to the camera input the intercom box is designated to. The intercom box then allows you and person near the intercom box to talk to one another.

Alarm/Action box

By means of an Alarm/Action box you can open a door remotely or extend your observation system with separate infrared detectors, magnetic door contacts, etc.

Alarm/Action box + PIR motion detector

This Alarm/Action box has an added Passive InfraRed motion detector (PIR).

Remark: One camera line can contain up to two intercom boxes and two Alarm/Action boxes with or without PIR.

Interface box

By means of the interface box it is possible to add or extract standard video and audio signals from the system cable (e.g. to connect third party cameras or a cash register interface).

Mains power adaptor

If the camera cable is more than 200m/600ft this adaptor must be used to provide the camera power supply.

Colour observation monitor

By means of this monitor you can expand your surveillance system with more observation posts (slave monitors). The slave monitor provides the same camera image as the system monitor. The monitor is fitted with a connector which allows you to connect a following slave monitor.

Time-lapse VCR

This VCR records the images from the observation system. The time lapse facility enables the VCR to extend the recording time of a tape. For example the recording time of an E-180 tape - depending on the VCR type - is extended to one day or even one month. Philips provides several types of time-lapse VCRs.

Protective housing for camera

For outdoor use a protective camera housing has to be used to protect the camera from rain and snow.

Tips for maintenance

Ventilation

Keep ventilation openings free to avoid the monitor for overheating. Do not place the monitor in the immediate vicinity of a heating source.

Cleaning

You can clean the monitor and the outside of the camera with a moist fluff-free cloth or shammy leather cloth.

When cleaning the camera lens, a special cleaning cloth should be used. Do NOT use cleaning fluids based on alcohol, methylated spirit, ammonia, etc..

Avoid direct contact with water.

Warning: The back of the monitor should only be removed by qualified maintenance personnel.

Technical specifications

System monitor

Picture tube	14", 90° deflection, 0.65mm pitch TV grade
Resolution (Line pairs)	340 TVL
TV standard	PAL, 625 lines, 50Hz, 2:1
Mains supply voltage	100 - 240V _{AC} +/-10%, 50/60Hz
Power consumption	70W max. (without cameras) 110W max. (with 4 cameras at 200m.)
Camera power supply	16-32V _{DC} , short-circuit protected
System synchronisation	Monitor locks to the mains Cameras lock to H and V of the monitor
Camera inputs	4 (system interface)
Slave monitor output	1 (system interface)
Microphone	electret
• Frequency range	300 - 3kHz
Alarm output	
• 4-pole screwblock	N.O./N.C. contact + system ground
• Contact rating	24V _{DC} , 2A
VCR	
• Video input	BNC (1V _{pp} , input impedance 75Ohm)
• Audio input	Cinch (0.5V _{pp} , input impedance 10kOhm)
• Video output	BNC (1V _{pp} , output impedance 75Ohm)
• Audio output	Cinch (0.5V _{pp} , output impedance 1kOhm)
AUX.	
• Video output	BNC (1V _{pp} , output impedance 75Ohm)
• Audio output	Cinch (0.5V _{pp} , output impedance 1kOhm)
System cable	4-wire dual twisted pair 'telephone' cable
Weight	12kg
Dimensions (h x w x d)	320x350x370mm.
Ambient temperature	
• Operating	+10...+45°C
• Storage	-25...+70°C
Ambient humidity	93...98%RH max.

Specifications may change without notice.